

RECEIVED
CENTRAL FAX CENTER

JUN 15 2007

REMARKS

This amendment is in response to the Office Action dated June 13, 2006. The deadline for responding has been extended to October 13, 2006 by way of a request for a 3 month extension of time.

In the event that the Examiner, after reviewing this response, intends to maintain any of the outstanding rejections Applicants undersigned representative hereby requests that the Examiner grant Applicant's representative an interview prior to issuance of a new office action. The Examiner is invited to call Applicant's representative at (732) 542-9070 to schedule such an interview. In the event of an interview, this response will serve as the basis of the interview discussion.

I. Introduction

New claims 46-51 have been added. Claims 20-26 and 35-45 were previously canceled without prejudice. Accordingly, claims 1-19, 27-34 and 46-51 are pending.

In the office action the Examiner objected to claims 44-45 because the previously submitted claim listing did not list them as being canceled although the text of the amendment indicated that they had been canceled. The claim listing provided herewith lists the status of claims 35-45 as "canceled" thereby addressing and overcoming the objection to the claims.

RECEIVED
CENTRAL FAX CENTER

JUN 15 2007

In the office action the Examiner rejected claims 1-3 and 5-34 under 35 U.S.C. §102(b) as being anticipated by Sanmugam (US 5,533,094). In addition, the Examiner rejected claim 4 under 35 U.S.C. §103(a) as being obvious over the Sanmugam patent when considered in view of U.S. patent No US 6,314,282 to Weber.

As will be discussed below, none of the applied references, whether considered alone or in combination anticipate or render obvious any of the pending claims.

II. The Pending Claims Are Patentable

1. The Pending Claims Are Not Anticipated Or Rendered Obvious by the Sanmugam Patent

In the Office Action the Examiner rejected claims 1-3 and 5-34 as being anticipated by the Sanmugam patent.

None of the pending claims are anticipated or rendered obvious by the Sanmugam patent. This is because the reference fails to disclose a method wherein an access node, e.g., a base station, performs the steps recited in claim 1. It also fails to disclose a base station which has the elements recited in claim 27.

As will be discussed below, the rejection is based on a misinterpretation of the applied reference. The error in the Examiner's interpretation is apparent from a review of the reference and the discussion of the dependent claims in which the Examiner interprets

elements of the applied reference differently than when applying the reference to the independent claim from which the dependent claim depends. Given the inconsistency of the interpretation, at a minimum, either the rejection of the independent claims is wrong or the rejection of the dependent claims is wrong. However, as will be discussed below, none of the claims are anticipated or obvious in view of the applied reference and all the rejections should be withdrawn.

A. The Applied Reference Does Not Anticipate or Render Obvious the Present Invention

The Sanmugam patent describes a system which uses a centralized paging system where the prioritization of incoming page requests occur in various elements outside of an access node, e.g., in core network nodes 250, 252, 253, with the paging request then being sent to and queued in a mobile switching center (MSC) 254 (see figures 1 and 9). The MSC 254 then sends page orders (see col. 12, lines 29-42) including previously determined paging priorities to base stations 256. The base stations 256 then transmit page messages in accordance with the previously determined priorities which were determined by one or more entities outside the base station. (See columns 12 and 13.)

The Sanmugam patent is based on receiving and processing of explicit incoming page requests received by various core network elements. This is in sharp contrast to various methods and apparatus of the present

invention, such as the method of claim 1, which are directed to the receipt, at an access node, of a data message directed to an end node and determining a paging requirement using packet classification based on a header field included in the data message.

Various embodiments of the present invention are also directed to other novel features. Such features provide access nodes, e.g., base stations, flexibility in determining resource allocation with regard to paging operations, e.g., with respect to generating pages in response to received data messages, paging information or paging requests.

The access node based paging control embodiments of the present invention are in sharp contrast to a case where paging decisions and determinations are handled in one or more core network nodes as is the case in the Sanmugam patent. An access node, which normally has more current information about limited airlink and other resources at the access node which may change in relatively short order in the case of wireless links, has the advantage of being able to use such current information in making paging resource allocation decisions and/or in prioritizing paging requests. Such an access node based approach to paging control differs sharply from the centralized core based approach to paging taught by the Sanmugam patent.

**B. The Rejection of the Claims is Based on a
Missinterpretation of the Sanmugam patent
and Should Be Withdrawn**

The Examiner's interpretation of the Sanmugam patent serves as the basis of all the rejections including the obviousness rejection of claim 4. Accordingly, by addressing the Examiner's interpretation of the Sanmugam patent Applicants will address and overcome all the rejections.

A review of claims 1, 2, and 5 and the Examiner's application of the reference to these claims shows some of the error's and inconsistencies with regard to the Examiner's interpretation of the reference. As discussed below the applied reference does not anticipate the claims when properly interpreted.

Claim 1 recites:

A communications method, the method comprising:
operating an access node to receive a data message directed to an end node; and
operating the access node to determine a paging requirement using packet classification based on a header field included in said data message.

Claim 2 recites, in pertinent part:

The method of claim 1,
... wherein said access node is a base station, the method further comprising:
operating said access node to allocate a paging transmission resource for transmitting a page as a function of the determined paging requirement ...

Claim 5 recites:

The method of claim 2, further comprising:
operating said access node to communicate a paging signal to a second node, indicating allocation of a paging transmission resource for use in transmitting a page corresponding to said received data message.

In rejecting the claims the Examiner states:

Regarding claim 1, Sanmugam discloses a communications [system] (see col. 4, lines 56-64; Figs. 1, 9), the method comprising:
operating an access node (e.g., BS 256; MSC 254) to receive a data message (e.g., page requests) directed to a mobile station (M1) which reads on the claimed "end node" (see col. 13, lines 1-32; col. 7, lines 8-15, col. 8, line 1-9; col. 9, line 2; Figs. 9, 8A-B), where page requests are based on paging information such as class of service, paging parameters, paging field, paging characteristics, and paging extent; and
operating the access node (e.g., 256; 254) to determine from said received paging requirement using packet classification based on a header field included in said data message (see col. 13, lines 1-32; col. 7, lines 8-15; col. 8, lines 1-9; col. 9, line 2; Figs. 9, 8A-B) where page requests are based on paging information such as class of service, paging parameters, paging field, paging characteristics, and paging extent in which a header field would be inherent due to paging information of the paging requests as evidenced by the fact that one of ordinary skill in the art would clearly recognize.

Applicants note that in the rejection of claim 1, the Examiner relies on a combination of two distinct

nodes, base station 256, and MSC 254 as corresponding to the recited access node and proceeds to cite text discussing functions which are mostly performed by the MSC 254 NOT the base station 256. Applicants note that the MSC 254 is NOT an access node and that the Examiner's citing of functionality performed by two different nodes in no way anticipates operating "an access node", which is one node NOT two, to perform the recited operations as recited in claim 1.

The error in the Examiner's interpretation which equates two different nodes to "an access node" becomes even clearer when the Examiner's rejection of claim 2 is reviewed. Claim 2 recites, in part, "wherein said access node is a base station". In rejecting claim 2, which depends from claim 1, the Examiner states "Sanmugam discloses the method of claim 1 ... wherein said access node (256) is a base station (256), further comprising: operating said first node [sic - should be access node] (e.g., MSC 254) to allocate ...

The Examiner makes it clear that in the rejection of claim 2 the base station (256) is considered to be the access node. However, when it comes time to indicate the function performed by the "access node" the Examiner refers not to an operation performed by the base station but to MSC 254, a different node. It is clearly inconsistent to interpret the base station 256 as the "access node" and then refer to the operation of the MSC 254 instead of the element 256 identified as the "access node".

The error in the Examiner's interpretation is extended to the rejection of the other claims. Consider for example the rejection of claim 5 which depends from claim 2. In rejecting claim 5 the Examiner states:

Regarding claim 5, Sanmugam discloses the he [sic] method of claim 2, further comprising:

operating said access node (e.g., 254, 256) to communicate a paging signal to a second node (e.g., base station 256) ...

As can be seen in claim 5, the Examiner is equating the base station 256 to being the access node and also "a second node" to which the access node communicates a paging signal. If the base station 256 is the access node then it is inconsistent for the Examiner to argue with respect to the same claim that it is "a second node" to which the access node communicates a signal.

As stated above, Applicants respectfully submit that the MSC 254 is not an "access node", e.g., base station, and that the base station 256 of the Sanmugan patent does not perform the steps recited in independent method claim 1 nor does it include the elements recited in independent claim 27. Accordingly, the rejection of claims 1 and claims 3-26 which depend therefrom should be withdrawn. In addition the rejection of independent claim 27 along with claims 28-34 which depend therefrom should be withdrawn for the same or similar reasons.

RECEIVED
CENTRAL FAX CENTER

JUN 15 2007

C. New Claims 46-50 Are Patentable

Support for new claims 46-50 can be found on page 36 and elsewhere in the application as filed. New claims 46-50 are patentable since the applied references do not disclose or render obvious the claimed subject matter.

III. Request for Clarification

In the event the Examiner intends to persist in the rejection of any of the pending claims based on the Sanmugan reference Applicants respectfully request that the Examiner clarify precisely what "node" in the applied reference the Examiner considers to be the recited "access node: is it 1) the base station 256; 2) the MSC 254; or 3) that the MSC and base station 256 in the applied reference are a single node which is an access node. Keeping in mind any clarification provided with regard to claim 1, please cite where the element identified as the access node is indicated to be a base station in the reference. With regard to claim 5, please clarify the rejection and indicate which node the Examiner considers to be the access node and which node the Examiner considers to be "a second node". If the Examiner contents that the access node and the second node are the same node please indicate how such an interpretation is consistent with the claims language and precisely where communicating "a paging signal" between the access node and the second node is described in the reference.

RECEIVED
CENTRAL FAX CENTER

JUN 15 2007

Applicants respectfully submit that such clarification is needed so that Applicants can have a full and fair opportunity to respond to any new or repeated rejection.

IV. Conclusion

Applicants respectfully submit that the application is now in condition for allowance.

If there are any outstanding issues which need to be resolved to place the application in condition for allowance the Examiner is invited to contact Applicants' undersigned representative by phone to discuss and hopefully resolve said issues. To the extent necessary, a petition for extension of time under 37 C.F.R. 1.136 is hereby made and any required fee for the extension of time and any other fee that maybe due with regard to this response is authorized to be charged to the deposit account of Straub & Pokotylo, deposit account number 50-1049.

Respectfully submitted,

June 15, 2007

Michael P. Straub
Michael P. Straub, Attorney
Reg. No. 36,941
Tel.: (732) 542-9070

CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that this paper (and any accompanying paper(s)) is being facsimile transmitted to the United States Patent Office on the date shown below.

Michael P. Straub

Type or print name of person signing certification

Michael P. Straub
Signature

June 15, 2007
Date